

COVID-19

Health Evidence Summary No.65

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This daily COVID-19 Health Evidence Summary is to signpost DFID and other UK government departments to the latest relevant evidence and discourse on COVID-19 to inform and support their response. It is a result of 3 hours of work and is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions.

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
16.06.2020	Effectiveness of isolation, testing, contact tracing, and physical distancing on reducing transmission of SARS-CoV-2 in different settings: a mathematical modelling study	The Lancet Infectious Diseases Article	<ul style="list-style-type: none"> A study of more than 40 000 individuals to assess contact patterns and potential SARS-CoV-2 transmission in different settings and to compare how combinations of self-isolation, contact tracing, and physical distancing could reduce secondary cases. The high transmissibility, the relative short serial interval and asymptomatic transmission of SARS-CoV-2 challenge effective isolation and contract tracing. This analysis estimated that a high proportion of cases would need to self-isolate and a high proportion of their contacts to be successfully traced to ensure an effective reproduction number 	Contact tracing, self-isolation, physical distancing, transmission

			<p>lower than 1 in the absence of other measures.</p> <ul style="list-style-type: none"> Combining isolation and contact tracing with physical distancing measures, especially in settings where contact tracing would be difficult, could increase the likelihood of achieving sustained control of SARS-CoV-2 transmission 	
16.06.2020	The potential impact of COVID-19 in refugee camps in Bangladesh and beyond: A modelling study	PLoS Medicine Article	<ul style="list-style-type: none"> Using a dynamic model of SARS-CoV-2 transmission, authors simulated how a C19 outbreak could spread within the expansion site according to 3 possible transmission scenarios (high, moderate, low) Results show that a large scale outbreak is very likely in this setting after a single infectious person enters the camp Hospitalisation capacity may be exceeded within 55-136 days after introduction Many approaches used to prevent and respond to C19 will not be practical in humanitarian settings. Novel and untested strategies should be considered including innovative solutions to fill health workforce gaps 	Refugee camps, transmission
15.06.2020	A novel cohort analysis approach to determining the case fatality rate of COVID-19 and other	PLoS ONE Article	<ul style="list-style-type: none"> Authors claim that this model can be used far more effectively than current models to estimate the CFR during an outbreak, allow for better planning and to better understand the impact of individual interventions on the CFR 	CFR

	infectious diseases			
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Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
16.06.2020	GM-CSF blockade with mavrilimumab in severe COVID-19 pneumonia and systemic hyperinflammation: a single-centre, prospective cohort study	The Lancet Rheumatology Article	<ul style="list-style-type: none"> • Treatment with mavrilimumab, an anti-granulocyte-macrophage colony-stimulating factor receptor-α monoclonal antibody, was associated with improved clinical outcomes compared with standard care in non-mechanically ventilated patients with severe COVID-19 pneumonia and systemic hyperinflammation • Treatment as well tolerated • Confirmation of this first preliminary evidence of a treatment effect of GM-CSF inhibition in COVID-19 supports further investigation 	mavrilimumab

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
17.06.2020	Understanding the impact of COVID-19 on essential medicine supply chains	CGD Blog	Anthony McDonnell Kalipso Chalkidou Prashant Yadav Dan Rosen
17.06.2020	Global Fund Survey: Majority of HIV, TB and malaria programs face disruptions as a result of COVID-19	The Global Fund News	
16.06.2020	How deadly is the coronavirus? Scientists are close to an answer	Nature News	Smriti Mallapaty
16.06.2020	Case isolation, contact tracing, and physical distancing are pillars of COVID-19 pandemic control, not optional choices	The Lancet Infectious Diseases Comment	Chandini Raina MacIntyre
16.06.2020	Delivering evidence-based critical care for mechanically ventilated patients with COVID-19	The Lancet Respiratory Medicine Comment	Jorge I F Salluh Fernando Ramos Jean Daniel Chiche
16.06.2020	GM-CSF in the treatment of COVID-19: a new conductor in the pathogenesis of cytokine storm?	The Lancet Rheumatology Comment	Ennio Giulio Favalli Roberto Caporali
15.06.2020	COVID-19: rethinking risk	The Lancet Global Health Comment	Nina Schwalbe

			Susanna Lehtimaki Juan Pablo Gutierrez
June 2020	Food security in uncertain times	The Lancet Planetary Health Editorial	

Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
WHO sitreps	WHO Africa	Ghana	COVID-NMA	WHO	FIND SARS-CoV-2 Test Tracker	Global COVID-19 Clinical Trial Tracker	CEPI
WHO dashboard	African Arguments	Indonesia	EPPI Centre	WHO International Clinical Trials Registry Platform (ICTRP)	FIND SARS-CoV-2 Diagnostics: performance data	US NIH registered clinical trials	Vaccine Centre LSHTM
Johns Hopkins University	European CDC	Nigeria CDC	Norwegian Institute of Public Health	Cytel	Serology-based tests for COVID-19	Solidarity trial	COVID-19 Oxford Vaccine Trial
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	
Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID-evidence			

Global 5050		UK	IFPRI COVID-19 Policy Response Portal	Cochrane			
CEBM, University of Oxford		US	COVID-19 Primer	Clinicaltrials.gov			
Humanitarian Data Exchange			NIH LitCovid	UKCDR			
Information is Beautiful			WHO COVID-19 Database				
LSHTM							
HealthMap (cases)							
The Commons Project							

C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Institutes/Centres /Fundors/Other	Health Topics	Social Sciences
WHO COVID-19 pandemic	Africa CDC	Annals of Internal Medicine	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	BMJ	LSHTM		IDA

WHO Q&A	Nigeria CDC	Bulletin of the WHO	ICL MRC Centre for Global Infectious Disease Analysis	Global Menstrual Collective	Disability and inclusion
WHO Global research	GeoPoll: SSA	Cambridge University Press	ODI	SLH: Handwashing in low resource settings	Coregroup IDDC
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University	RBM Partnership	Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane	Center for Global Development		Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		
UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	JAMA Network	Norwegian Institute of Public Health		
UNHCR	South African Government	The Lancet	Oxford Centre for Evidence-based Medicine		
UNICEF		medRxiv and bioRxiv (Preprints)	HEART		
UNESCO		NEJM	UKRI		

UN WFP		Oxford University Press	Evidence Aid		
GOARN		PLoS	NIH		
EPI-WIN		SAGE journals	IFPRI Resources and Analyses of C19 Impact		
World Bank		Science	Prevent Epidemics		
Our World in Data		Springer Nature			
COVID-19 Narratives by David Nabarro		SSRN (Preprints)			
Reliefweb		Wiley			
Humanitarian OpenStreetMap Team					
Global Partnership for Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					
Premise COVID-19					

Global Impact Study					
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Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
24-25.06.2020	Africa's leadership role in COVID-19 vaccine development and access	Zoom webinar		African Union & Africa CDC
18.06.20 2 pm EDT	Social, political, and public health factors fuelling the COVID19 crisis in Brazil and Colombia	Virtual event	45 mins	Broad Global Health Initiative
Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
16.06.2020	Africa beyond COVID-19	Virtual event	1h 30 hours	ODI
Available now	COVID-19: Effective Nursing in Times of Crisis	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
Available now	WHO Academy and WHO Info mobile applications	Mobile app		WHO
Available now	COVID-19: Pandemics, Modelling and Policy	Online learning	2 weeks 2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University

12.05.2020	COVID-19 and maintaining quality essential health services	Webinar	1 hour	WHO & ISQua – Dr Shams Syed, Dr Peter Lachman, Dr Teri Rynolds & Dr Ed Kelley
11.5.2020	COVID-19 Contact Tracing course	Online learning	5 hours	Johns Hopkins Bloomberg School of Health
7-28 May 2020	Virtual Evidence Weeks	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST (Geneva time)	COVID-19 Open online brief with Dr David Nabarro	Event	1h	4SD
30.04.2020	Professor Chris Whitty's Gresham lecture on COVID-19	Event	1h 20	Gresham College
Available now	Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control	Online learning	3 hours	WHO
Available now	Responding to COVID-19: Real-time training for the coronavirus disease outbreak	Online learning	Multiple self-paced course	WHO
25 May 2020	COVID-19: Tackling the Novel Coronavirus	Online learning	3 weeks 4 hours weekly study	FutureLearn LSHTM/UK PHRST

Available online now without mentors. Updated version will commence early June 2020	COVID-19 Diagnostics and Testing	Online learning	3 weeks 3 hours weekly study	FutureLearn FIND/LSHTM/ASLM
6 April 2020	COVID-19 Critical Care: Understanding and Application	Online learning	5 weeks 1 hour weekly study	FutureLearn University of Edinburgh & Royal College of Physicians of Edinburgh
Available now	COVID-19 supporting online courses	Online learning	Multiple self-paced course	BMJ Learning

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Rapid review methodology

The rapid daily search for peer-reviewed literature is carried out through a PubMed search with the following keywords ("COVID-19" OR "severe acute respiratory syndrome coronavirus 2" OR "2019-nCoV" OR "SARS-CoV-2" OR "2019nCoV" OR "coronavirus") AND ("Africa") OR ("equity" OR "equities") OR ("poverty"), restricted to articles published in the previous 2 to 3 days, in English. This is complemented by a search of the homepage of the following high-impact global health journals: The Lancet journals, New England Journal of Medicine, Nature, JAMA, Annals of Internal Medicine, Cochrane Reviews, BMJ Global Health, the PLoS journals and a Twitter search of their Twitter pages. A search also of preprints from bioRxiv and medRxiv. Please note that papers that have not been peer-reviewed are highlighted in red. All primary research papers that relate to the primary and secondary impacts of the COVID-19 response in LMICs, and disease control and health system responses are included. Articles related to tackling the secondary impacts on other sectors are not included. Additional commentaries, opinions, and commissioned pieces are selected based on relevance.

The search for dashboards, guidelines, tools, editorials, comments, blogs, opinions and news is through the academic journals listed above, C19 resource hubs and following lead academics and professionals on Twitter.

About this report

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alone. K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development Department (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

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